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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,112	12/05/2003	Dapeng Wang	2269-3579.2US (98-0062.02)	3169
24247	7590	05/23/2005	EXAMINER	
TRASK BRITT P.O. BOX 2550 SALT LAKE CITY, UT 84110			ROSE, ROBERT A	
			ART UNIT	PAPER NUMBER
			3723	

DATE MAILED: 05/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/729,112

Applicant(s)

WANG, DAPENG

Examiner

Robert Rose

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 27-32 is/are allowed.
- 6) ☒ Claim(s) 1-6, 9, 14-18, 21 and 26 is/are rejected.
- 7) ☒ Claim(s) 7, 8, 10-13, 19, 20 and 22-25 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Receipt is acknowledged of Applicant's Prior Art Statement, filed December 5, 2003. All of the references therein have been considered and made of record.
2. Claims 26-32 have been added.
3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3, 6, 9, 14-15, 18, and 21 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Breivogel et al. Breivogel et al disclose a cmp apparatus and method of polishing, comprising all of the subject matter set forth in Applicant's claims above. Note polishing pad(23); deformable pad(22)(20) having isolated solid supports(22); and ventral layer(20).
5. Claims 1, 3-6, 9, 14-18, 21, and 26 are rejected under 35 U.S.C. 102(a) as being anticipated by Eppert Jr. et al. Note figures 1-2 of Eppert Jr. et al which show a deformable layer comprised of a plurality of solid supports and an integral dorsal or ventral layer, corresponding to that shown in the embodiments of Applicant's figures 8 and 10. Note the use of a cushioning pad between the solid supports and the lower surface of the polishing pad.
6. Claims 1-2, 9, 14, and 21 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by Tolles et al(US 6217426). Tolles et al discloses a CMP apparatus and

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method of polishing comprising all of the subject matter set forth in applicant's claims above.

7. Claims 7-8, 10-13, 19-20, and 22-25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Claims 27-32 are allowed.

9. Applicant's arguments filed March 7, 2005 have been fully considered but they are not persuasive. Applicant has argued that the solid supports in Breivogel et al are not deformable, but are disclosed as rigid. However, the degree of deformability is not specified in the claim, and even supports comprised of an epoxy composition are subject to some degree of deformation. Moreover, the newly cited art to Eppert, Jr. et al clearly shows a deformable pad(3) made up of solid supports, with integral ventral(fig.1), or dorsal(fig.2) layers, which are described as "semi-rigid", and which are located between the polishing pad and platen. Newly cited art to Tolles et al also discloses deformable protrusions(60), which form a layer of solid supports which underlie the polishing pad(44).

10. In view of the new grounds of rejection not necessitated by applicant's response, this action is not made final.

11. Any inquiry concerning this communication should be directed to Robert Rose at telephone number (571) 272-4494.

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May 18, 2005

Robert Rose  
Primary Examiner  
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A handwritten signature in black ink, appearing to read "Robert Rose", written over the printed name.